

Species Tag:	98001	Species Name:	H2SO4
Version:	2		Sulfuric acid
Date:	Jun. 1992		
Contributor:	R. L. Poynter		
	E. A. Cohen		
Lines Listed:	5690	Q(300.0)=	154746.934
Freq. (GHz) <	524	Q(225.0)=	100876.415
Max. J:	51	Q(150.0)=	55028.470
LOGSTR0=	-7.0	Q(75.00)=	19482.499
LOGSTR1=	-7.0	Q(37.50)=	6894.390
Isotope Corr.:	-0.022	Q(18.75)=	2441.348
Egy. (cm ⁻¹) >	0.0	Q(9.375)=	865.883
μ_a =		A=	5160.682
μ_b =		B=	5024.566
μ_c =	2.725	C=	4881.012

The experimental frequency measurements and dipole moment were taken from R. L. Kuczkowski, R. D. Suenram, and F. J. Lovas, 1981, J. Am. Chem. Soc. **103**, 2561. The maximum J value was extended well beyond what would be taken as the usual cutoff from the available data. This extrapolation was employed to sketch out what lines might exist at the higher frequencies and absorb radiation in the Venus atmosphere. These lines show huge predicted errors and their frequencies will be grossly wrong. However, they will give an idea of the absorption that might be expected at these frequencies. Measurements are planned in the future to reduce these errors.